Missouri Department of Natural Resources

Water Quality Coordinating Committee
Water Pollution Control Program

Meeting Minutes

March 18, 2003

WATER QUALITY COORDINATING COMMITTEE

James C. Kirkpatrick State Information Center
Interpretive Center Conference Room
600 West Main Street
Jefferson City, Missouri

March 18, 2003
10:00 a.m.

MEETING AGENDA

USGS Bacterial Contamination Report, Jerri Davis, USGS, WRD

Re-Mapping Missouri's Watersheds, Terry Barney, NRCS

Other

Agency Activities

Meetings & Conferences

MISSOURI WATER QUALITY COORDINATING COMMITTEE

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MINUTES

Attendees:

Becky Shannon	DNR/WPSCD/WPCP	John Knudsen	DNR/WPSCD/WPCP
Terry Frueh	DNR/GSRAD/WRP	Michael Heaton	DNR/WPSCD/NERO
Richard Gaffney	DNR/GSRAD/WRP	Verel Benson	UMC – FAPRI
Bob Steiert	EPA Region 7	Michael Bollinger	Ameren
Jeannette Schafer	EPA Region 7	Charlie DuCharme	DNR/GSRAD/WRP
Charles Putman	National Park Service	Trent Stober	MEC Water Resources
Roger Korenberg	DNR/OAC/EAO	Frank McDaniels	DNR/WPSCD/PDWP
Paul Andre	MO Dept. of Agriculture	Terry Timmons	DNR/WPSCD/PDWP
Cindy DiStefano	MO Dept. of Conservation	Todd Blanc	DHSS/SEPH
Bob Ball	NRCS	Wendi Rogers	UMC – FAPRI
Sharon Clifford	DNR/WPSCD/WPCP	Richard Gaskin	KCMO Water Services Dept.
Sherry Chen	DNR/GSRAD/WRP	Dorris Bender	Independence Water Pollution
Gail Wilson	DNR/WPSCD/WPCP	Jerri Davis	USGS Water Resources Div.
Kevin Scherr	DNR/WPSCD/SWCP	Terry Barney	NRCS
Anne Peery	DNR/WPSCD/WPCP	Darlene Schaben	DNR/WPSCD/WPCP

USGS Bacterial Contamination Report, Jerri Davis, USGS, Water Resources Division
(PowerPoint Presentation)
Jerri presented a study that USGS has been working on since the winter of 1999 to determine the source of the problems in the Jacks Fork River. Jerri showed an aerial view of the Jack's Fork area, which is a part of the Ozark National Scenic Riverways. It is the largest tributary to the Current River. A picture was shown of the beautiful Alley Spring, which was the uppermost reach of the river from where they were sampling. The Jacks Fork River is designated as an Outstanding National Resource Water. It has five designated uses. Jerri reported that because of the intense recreational use, the whole body contact recreation standard is occasionally violated. One of the largest cross-country trail ride facilities is located south of Eminence on the north side of Jacks Fork River. There are approximately 6-7 organized trail rides per year. Sometimes there are as many as 3,000 horses in the area during a trail ride. An 8-mile reach of the Jacks Fork River is on Missouri's 303(d) list for fecal coliform bacteria. Potential sources of bacteria have been identified (Eminence WWTP, pit toilets, septic systems, trail rides, canoeists, boaters, tubers, cattle, wildlife). USGS set up a three-phase study to better understand the extent and sources of the contamination. Phases I and II were supported by the USGS and National Park Service Water Quality Partnership program. There is Congressional funding given to USGS to be used to work with the National Park Service to solve problems occurring within the boundaries of national parks. The information collected would hopefully result in removal of the Jacks Fork River from the 303(d) list.

In Phase I, USGS wanted to determine specific locations of the problem and magnitude of the problem. Phase II was to establish a network to further document the problem and understand the sources. Phase III was to establish a monitoring network for long-term water quality monitoring. Jerri showed a photo of the study area

and sampling sites. Most sampling sites started in Eminence and downstream. Other sampling was done outside the 303(d) reach in order to get an overall coverage of the study area. Jerri explained how the Phase I sampling sites was selected and how sampling was done, the times of day and why they sampled that location. Phase II sampling was narrowed to 16 sites as a result of the Phase I sampling. Samples were collected during base flow. Four types of indicator bacteria (including fecal coliform), physical properties and nutrients were looked at. Microbial source tracking was also done. In Phase II they found that fecal coliform densities, that were not related to wet weather flow, increased during trail rides. However, the sources of bacteria have not been positively identified. The whole body contact standard was exceeded at one or more sites on four sampling occasions during cross-country trail rides. USGS determined that the Eminence WWTP was not a contributor. From observations, contributing factors may include physical disturbance of streambed sediment, defecation into the river, fecal material carried into the river on feet of animals and leakage of sewage from unknown sources. The microbial source tracking results in this part of the study were inconclusive. Phase III sampling included 11 sites. Specific recreation activities were targeted. Another method of microbial source tracking was used. Basically, Phase III results were about the same as Phase I and II. From these efforts, 2 reports have been published. These are available on the USGS web site. For a future project, a proposal was submitted to the USGS National Park Service Partnership Program and funding received to examine in more detail the role of streambed sediments in the storage and re-suspension of fecal bacteria. Another proposal has been submitted for next year to do a time-of-travel and bacteria die-off study. This is another method to further identify source. They also plan to continue Phase III long-term monitoring if funding is available. Jerri mentioned that it was exciting to see a couple of the wild horses in the area while out sampling. Discussion and questions followed regarding some of the results and findings. If you have any questions, you may contact Jerri at (573) 308-3829 or by email at jdavis@usgs.gov.

Re-Mapping Missouri's Watersheds, Terry Barney, NRCS
(PowerPoint Presentation)
Bob Ball introduced Terry. Terry is a Resource Inventory Specialist working with NRCS and has been working on the development of Missouri's National Watershed and sub-Watershed Mapping. Terry said he felt this has been more of an evolution than development. He gave an overview of NRCS's latest activity in watershed mapping statewide. This project has been in the works for 30 years. In 1974, USGS completed the 8-digit watershed/hydrologic unit (HU) mapping level. In 1994, NRCS completed the 14-digit level expansion on that watershed mapping. In 2002, the 12-digit watershed mapping was completed based on a new interagency standard. In the mid-1990's it was decided that an interagency national watershed mapping standard was needed. The objective was to develop an interagency national standard that could apply to all states and end up with a seamless nationally consistent database. This will be done by going through the Federal Geographic Data Committee's Spatial Water Data Subcommittee and receiving certification. Through an MOU with MDC's Fisheries Division, Missouri had already started a revision of the 14-digit HU layer. Although this 14-digit dataset was good in terms of the hydrological characteristics, it still contained some inconsistencies. After the standard became available, this latest 12-digit watershed mapping is the result of their work. (Note: The new 12-digit HUs are analogous to current 14-digit HUs.) There are approximately 1,981 HUs. Many of those are true watersheds. In working with the spatial coverages they used a list of delineation criteria. There had to be a consistent coding system, no gaps and no boundaries running down the middle of a stream. The whole dataset was based on surface topography. All of the 8-digit boundaries remained the same. Terry showed examples of the different levels, the segmentation process, the coding and the naming convention. Every 10- and 12-digit unit has a name. The standard puts emphasis on uniform size. Each unit should have more than 10,000 acres. Some of the units in Missouri have less acreage and may cause problems with certification. Units should be between 10,000 – 40,000 acres. The standard requires matching boundaries with bordering states. Most of the line matching with states bordering Missouri has been completed. Some of those states are not as far along in the process and are still working on their coding and line work. Terry explained the delineation methods that were used.

The certification process is a 2-step verification process. NRCS will submit Missouri's 12-digit dataset to the National Cartography and Geospatial Center. If there are issues that need resolved, it will be returned. If they approve it, it will be submitted to the Federal Geographic Data Committee's Spatial Water Data Subcommittee for approval. If they say it meets the national standards, the State Conservationist will be notified and it will be certified. Missouri's dataset should be ready to submit next week. A letter will be included with a statement requesting the unit sizes be left as is. The dataset will not be widely distributed until certification has been received. Several agencies have worked together preparing this dataset. All federal agencies will be using the same dataset. The database is referred to as the national Watershed Boundary Dataset. Terry felt the biggest issue from state to state is going to be watershed unit size.

If you are interested in more information or related links on national datasets, go to www.ftw.nrcs.usda.gov/huc_data.html.

Bob Steiert commended Terry and Bob Ball on all the work they have put in on this project.

Other

Becky announced that Dick Gaffney will be retiring on March 31, 2003. There will be a reception on March 28 at the E. Elm DNR Conference Center.

EPA 2003 Appropriations -- Bob Steiert read some of the projects listed in the appropriations for 2003: $630K to MARC for agroforestry; $10M for National Rural Water; $4M lump for grants for states to establish long-term ambient monitoring & assessment framework at relevant geographic scales (competition). Also, money for hypoxia education in Kansas City, MO; Valley Watermill Watershed Education & Demonstration Center, Springfield, MO; and continued development of basins monitoring. State tribal assistance money: over $1B for Clean Water SRF; $850M for SDW SRF; $20M for Environmental Information Exchange Network (data management). 106 money: $192 available nationally (about same as last year). 319: $240M. 45% cost share projects (congressional add-ons): $11.5M for 14 projects for MO -– Springfield, St. Louis, Jefferson County, Caldwell County, Monroe County, Lake St. Louis, Kansas City, St. Joseph, Dudley, Boliver, Warrenton, Warrensburg, Monett, and Joplin.

Competition – EPA passed regulations in relation to competition for EPA grants. There is now a Competition Manager that looks at the RFPs that go out. Be sure to follow those guidelines closely when submitting proposals. If you have any questions about the RFP, contact the person listed on the RFP. This is also available on the web.

Jeannette informed the group that there is a list on their web site of all the EPA grants that are currently available through Region 7 - www.epa.gov/region7/economics.

Atrazine IRED – Paul Andre said the group should have received an email with the Atrazine IRED proposal that came out. The document is missing the Appendices and at least one table. EPA feels this is not that critical to the IRED. The MOA between EPA and the registrants has not been published. There is still only one signature obtained and a question of whether the others are going to sign it. Originally, there were 3 lists of watersheds with some type of atrazine problem in the MOA, but now there are 2. Dearborn and Buckland are going to be on the one-strike list. There are a total of 8 on that list nationwide. The comment period will probably be extended past the 30 days.

Becky said we are working at getting an update of the Atrazine IRED on the agenda for the April meeting.

Dorris Bender – MO Water Environment/American Water Works Association is having their meeting next week at Tan-Tar-A.

Charlie DuCharme – Open Houses are being planned in May on the results of the Upper Mississippi River Flow System Frequency Study. They will be held in St. Louis and Kansas City.

Kevin Scherr said they had received 17 SALT applications. The review team meets March 19 – 20. The ranking will go to the Commission at the May meeting and projects expected to begin in July 1. They expect to fund approximately 12 of those projects.

John Knudsen announced that the WPCP's Nonpoint Source Unit was recognized as the Water Conservationist of the Year for 2002 by CFM.

Darlene Schaben explained more about the listserv. Anyone can subscribe by going to the WQCC web page. (http://www.dnr.state.mo.us/wpscd/wpcp/wpcwqcc.htm) You can also unsubscribe at this page if you no longer want to receive WQCC information. Right now they are coming from Laura Teasley. We are still working to refine this process.

Sharon Clifford mentioned that the TMDL Policy Advisory Committee (PAC) meeting is being held this afternoon.

Jeannette Schafer mentioned the MO River Natural Resources Conference is scheduled June 1-4 in Atchison, KS. Jeannette had a draft agenda. There are some water quality issues on the agenda. There is a New England Region's Wetlands Conference scheduled. They will have presentations on nutrient criteria and criteria for wetlands. Let Jeannette know if you are interested.

Jeannette also mentioned that the 2000 TMDL Rule has officially been withdrawn. This will be discussed further at the TMDL PAC meeting this afternoon. We are currently still operating using the 1992 rule.

Bob Steiert said EPA has issued a guidance package called "Elements of a State Water Monitoring & Assessment Program" that is 10 different elements that each state should have. Information is on the web site: www.epa.gov/owow/monitoring/elements. These are specific parameters that should be part of a state water monitoring plan.

Missouri River Relief is coming to Kansas City on the Missouri River on September 12–13. This is involved with Week of Water. There are other places that are scheduled along the Missouri River where there will be people on barges cleaning up the banks of the Missouri River.

Dick Gaffney gave a status report of the State Water Plan. The Interagency Task Force met on the southern Missouri regional draft report. They are combining southwest and southeast Missouri for purposes of the report. The Northwest Regional report is now on the web for review and comment. These reports will only be published electronically due to budget issues. The Metropolitan St. Louis report draft is nearly completed. The Interagency Task Force will then meet by the end of the fiscal year. The State Water Plan will be the priority for the next fiscal year.

Becky Shannon mentioned there are on-going budget issues. Becky also mentioned that Jim Burris from the department's Southeast Regional Office will be retiring May 31.

Meetings & Conferences

April	15-17	Water Quality Short Course, Columbia
June	1-4	7th Annual Missouri River Natural Resources Conference, Atchison, KS
Sept.	12-13	Missouri River Relief, Kansas City, MO